| REVISIONS | | | | |
|---|---|---|---|---|
| ZONE | LTR | DESCRIPTION | DATE | APPROVED |
| | 1 | PROTOTYPE | 1-27-82 | |
| | 2 | PROTOTYPE RELEASE | | |
| | A | PRODUCTION RELEASE ECO #498 | | |
| | A.2 | REVISED PER ECO # 521 | 9-19-82 | |
| | B | REVISED PER ECO # 525 | | |
| | C | REVISED PER ECO # 557 | 1-9-89 | |
| | C.1 | REVISED PER ECO # 681 | | |
| | D | REVISED PER ECO # 689 | 20 DEC 89 | |
| | E | REVISED PER ECO # 689 Rev B | 10 APR 90 | |

SHT 11 SHT 4 SHT 5,16 SHT 5,15 SHT 6,11 SHT 5,6,10 SHT 4,5,6,19

BR BERR MRESET HALT BGACK DSACK0 DSACK1

SHT 5,16 SHT 15 SHT 5,6,12,15 SHT 15 SHT 17 SHT 19 SHT 15 SHT 5 SHT 5 SHT 15,16

MCLK SBXIRQ LPERR LINSEL SIRQ TIRQ PIRQ MIRQ NMINC NMINO SCSIRQ

U11 16R4A

R21 5.5K R20 3.3K R4 3.3K R8 3.3K R3 3.3K RN1 3.3K RN7 3.3K

IPL2 IPL1 IPL0 (NC)

AVEC SBERR HALT BGACK DSACK0 DSACK1

SHT 5,6,15 SHT 10

TCLK BCLK CCLK

P1 31 CCLK

U74 OSC 20 MHz

R16 3.3K R13 3.3K

U151 A B C D F00

U147 A B F74

FCLK

U152 A B C D S37

R12 10 R11 10 R9 33 R14 33 R10 33 R17 33

J37 J34 TCLK MCLKP MCLK

U73 OSC 23.9 33.3/4 MHz

INTOUT

INT0-INT7

SHT 4,5,10,11,17 SHT 14,15

ID0-ID15

P1 41 42 39 40 37 38 35 36

INT0 INT1 INT2 INT3 INT4 INT5 INT6 INT7

J31

U47 L9640

RN11 3.3K RN12 10K RN1 3.3K

RUSIR SYSIRQ

U111 16L8A

RN8 3.3K CDIS J22

U58 MC68020 12/16/20MHz

PADI2 - PADI7 PAD2 - PAD27 SHT 2,9

A0-A28

A26 PAD27 A25 PAD26 PAD25 PAD24 PAD23 PAD22 PAD21 PAD20 PAD19 PAD18 PAD17 PAD16 PAD15 PAD14 PAD13 PAD12 A11 A10 A9 A8 A7 A6 A5 A4 A3 A2 A1 A0

SIZ1 SIZ0 RMC PAS PDS RW BG D31 D30 D29 D28 D27 D26 D25 D24 D23 D22 D21 D20 D19 D18 D17 D16

D15 D14 D13 D12 D11 D10 D9 D8 D7 D6 D5 D4 D3 D2 D1 D0

D16-D31 D0-D15

RN6 3.3K FC2 FC1 FC0

U67 20L8A

AS FC0 FC1 FC2 A13 A14 A15 A16 A17 A18 A19 A1 A2 A3

SBERR COP TACK SIACK TIACK PIACK

SHT 5 SHT 5 SHT 17 SHT 17 SHT 15 SHT 15

A0-A28 A0-A28 SHT 2,3,4,5,6,7,10,11,13,14,15,16,17

SBMA PAS SHT 10,11,13,17 SHT 2,4,6,7

U51 16L8A

AS SBMA FC1 FC0 A16 A19 BOOT

MBMS MBIO MBR IOS A25 A24 FC2 P3 BOOT

SHT 10 SHT 10 SHT 10,11 SHT 15,17 SHT 14,17 SHT 2,6 SHT 2,6 SHT 2,4,6 SHT 5,6,11

FC0-FC2

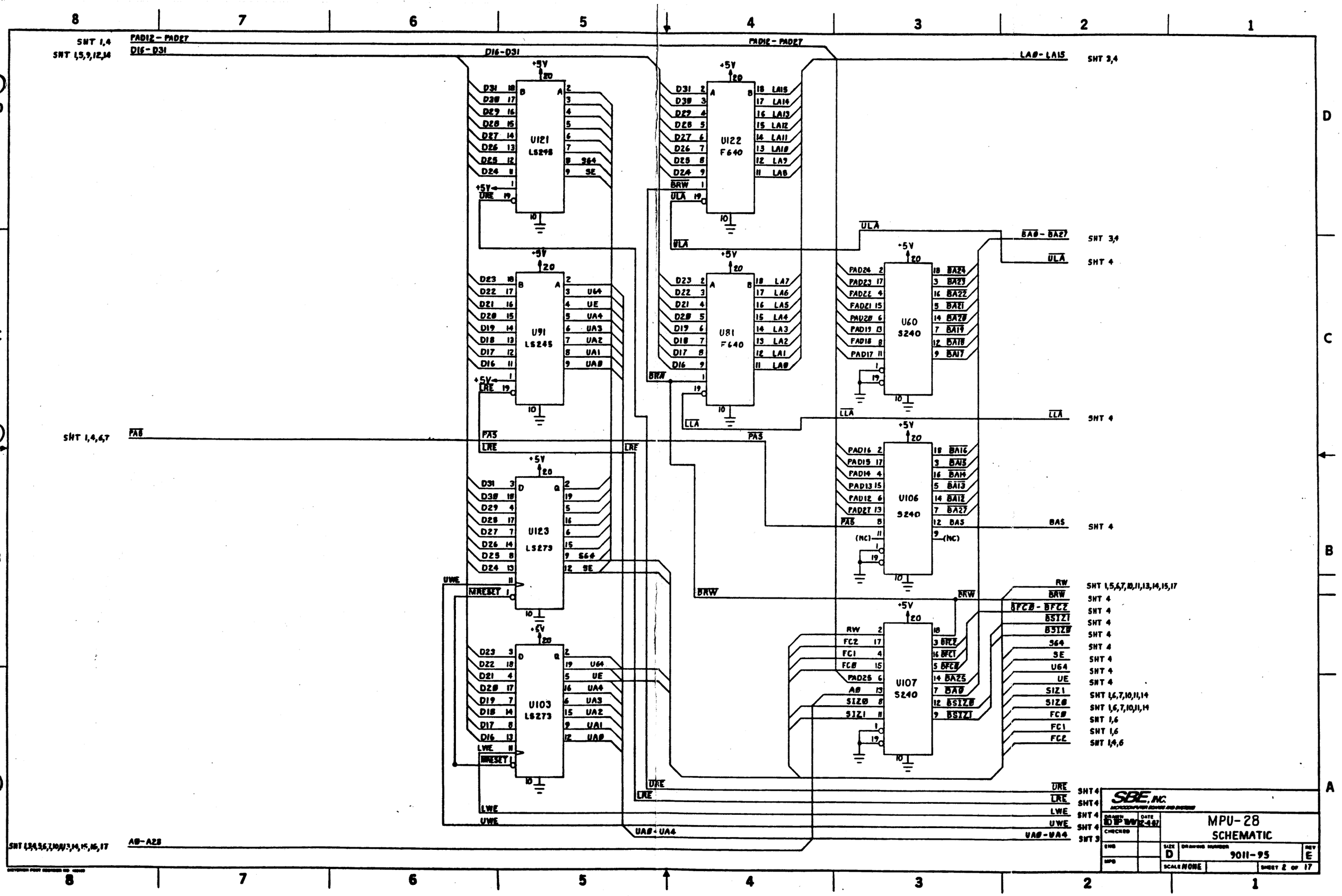
SIZ1 SIZ0 RMC D16-D31 D0-D15 PDS RW BG

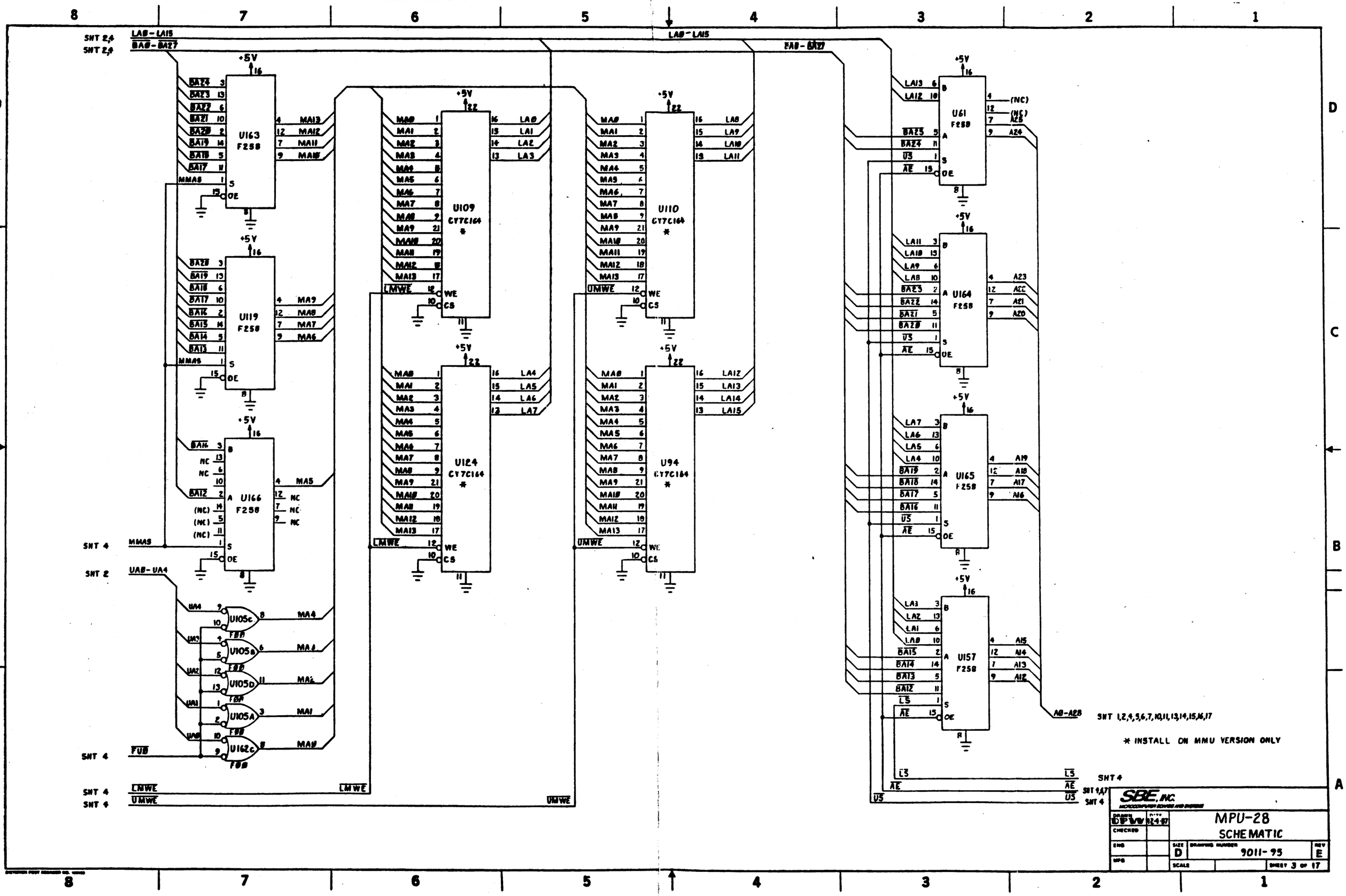
SHT 2,6,7,10,11,14 SHT 2,6,7,10,11,14 SHT 10,11 SHT 2,5 9,12,14 SHT 5,8,12 SHT 4,17 SHT 2,5,6,7,10 11,13,14,15,17 SHT 11

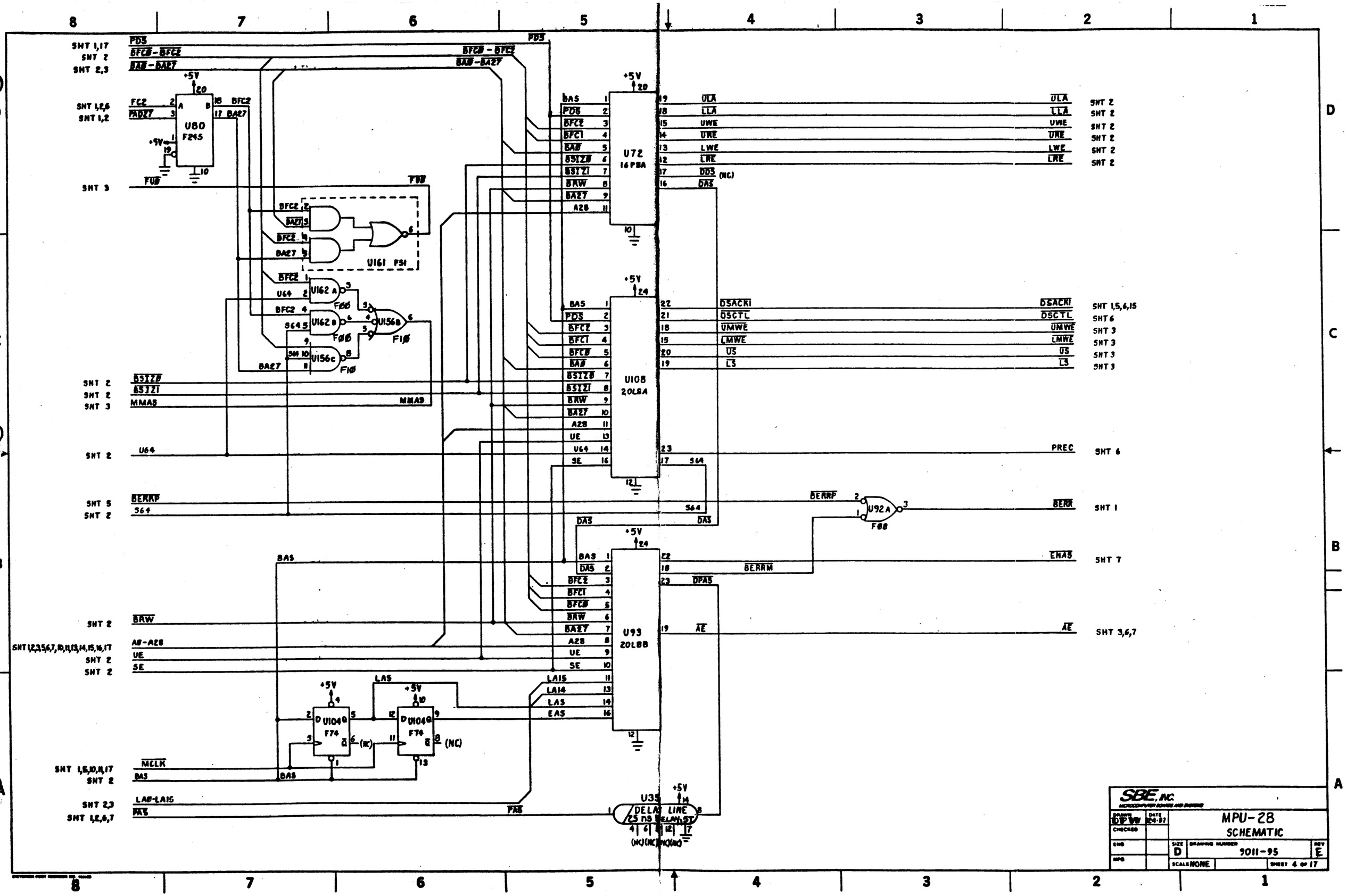
CLOCKS, INTERRUPTS, CPU, AND ADDRESS DECODING

SBE 2400 Bisso Lane Concord, CA 94520 (415) 680-7722

| | | |
|---|---|---|
| DRAWN DFW | DATE 2-4-87 | MPU-28 SCHEMATIC |
| CHECKED | 9/6/88 | |
| ENG | 1-27-82 | SIZE D DRAWING NUMBER 9011-95 REV E |
| MFG | | SCALE NONE SHEET 1 OF 17 |


SHT 1,4
PAD12 - PAD27
SHT 1,5,9,12,14
D16 - D31
D16-D31
PAD1E - PAD27
LA8 - LA15
SHT 3,4
U121
LS245
U122
F640
U91
LS245
U81
F640
ULA
BA8 - BA27
SHT 3,4
SHT 4
U60
S240
LLA
SHT 4
SHT 1,4,4,7
PA8
PA3
LRE
U106
S240
BAS
SHT 4
U123
LS273
UWE
MRESET
BRW
U107
S240
SHT 1,5,6,7,10,11,13,14,15,17
SHT 4
BFC8 - BFC2
BSIZ1
BSIZ0
S64
SE
U64
UE
SIZ1
SIZ0
FC0
FC1
FC2
SHT 1,6,7,10,11,14
SHT 1,6,7,10,11,14
SHT 1,6
SHT 1,6
SHT 1,4,6
U103
LS273
LWE
UAB - UA4
SHT 3
SHT 1,3,4,5,6,7,10,11,13,14,15,16,17
A8 - A28
SBE, INC.
MICROCOMPUTER BOARDS AND SYSTEMS
MPU-28
SCHEMATIC
9011-95
SIZE D
REV E
SCALE NONE
SHEET 2 OF 17


LAB-LA15
BAB-BA27
SNT 2,4
SNT 2,4
U163 F258
U119 F258
U166 F258
U109 CY7C164 *
U124 CY7C164 *
U110 CY7C164 *
U94 CY7C164 *
U105c
U105B
U105D
U105A
U162c
UAB-UA4
FUB
LMWE
UMWE
SNT 4
SNT 2
U61 F258
U164 F258
U165 F258
U157 F258
AB-A23
SNT 1,2,4,5,6,7,10,11,13,14,15,16,17
* INSTALL ON MMU VERSION ONLY
SNT 4
SNT 4,7
SNT 4
SBE, INC.
DRAWN DFW 12-1-87
CHECKED
ENG
MFG
MPU-28
SCHEMATIC
SIZE D
DRAWING NUMBER 9011-95
REV E
SCALE
SHEET 3 OF 17



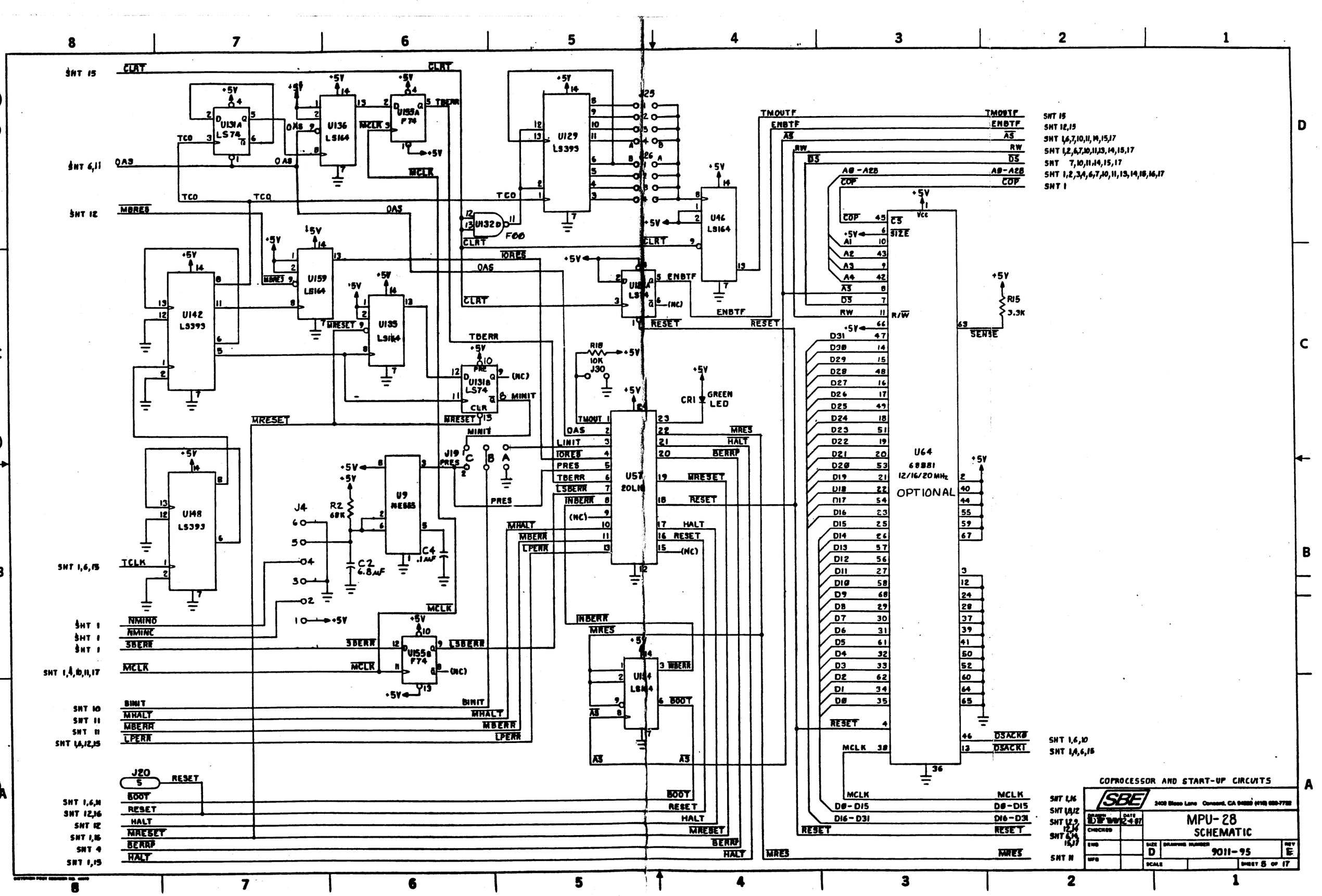

| | |
|---|---|
| DRAWN | DPW |
| DATE | 12-4-87 |
| CHECKED | |
| ENG | |
| MFG | |

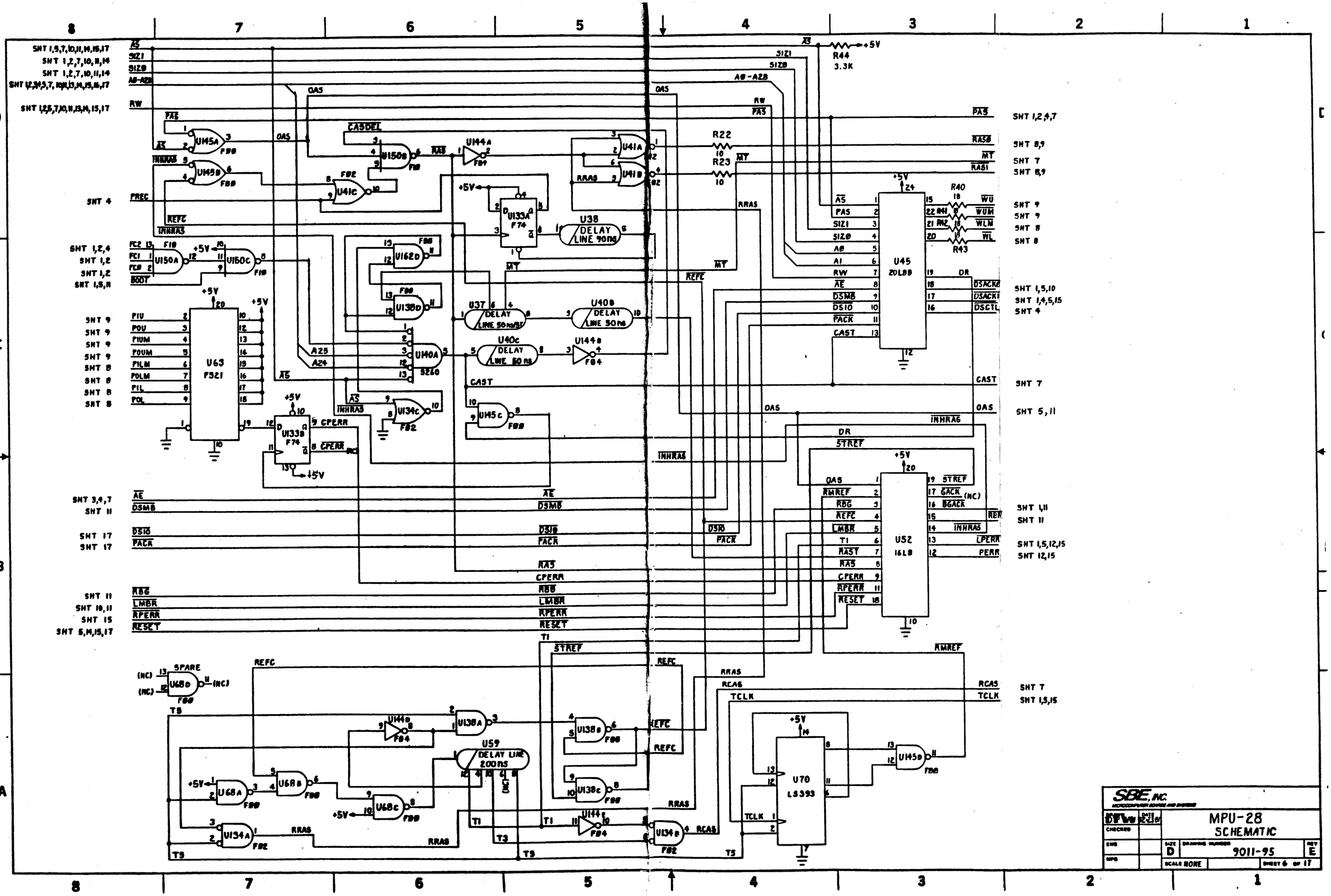
SBE, INC.

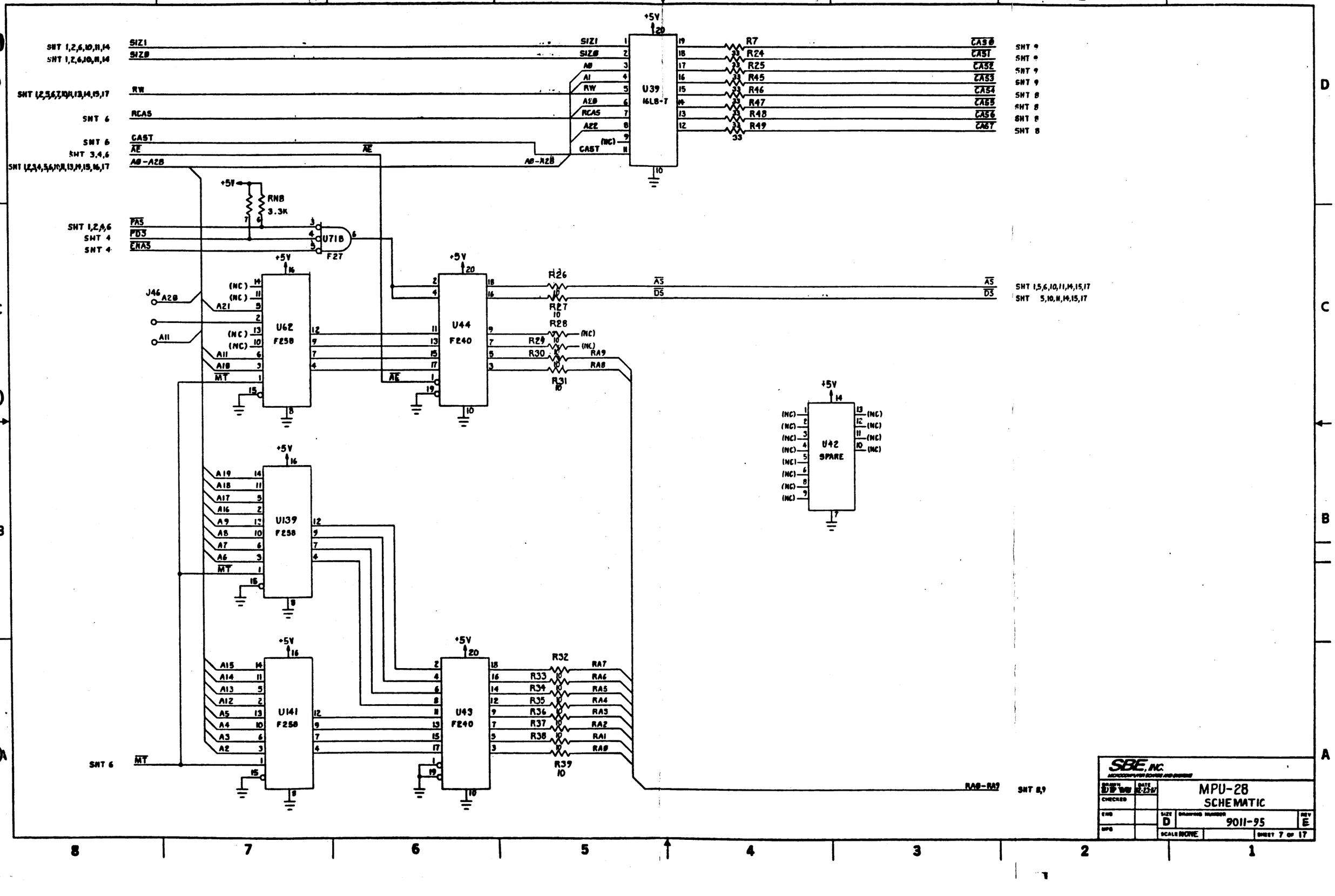
MPU-28
SCHEMATIC

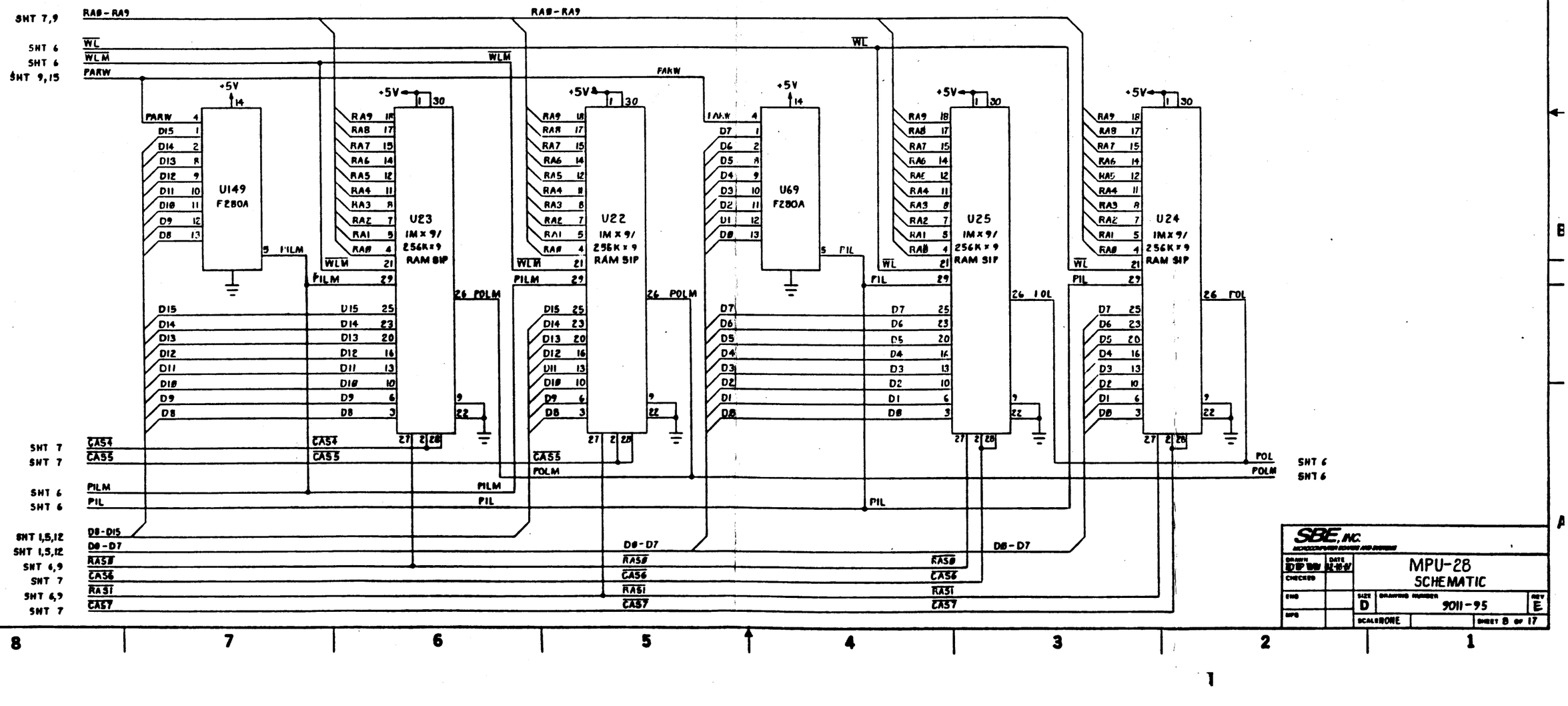
SIZE D | DRAWING NUMBER 9011-95 | REV E

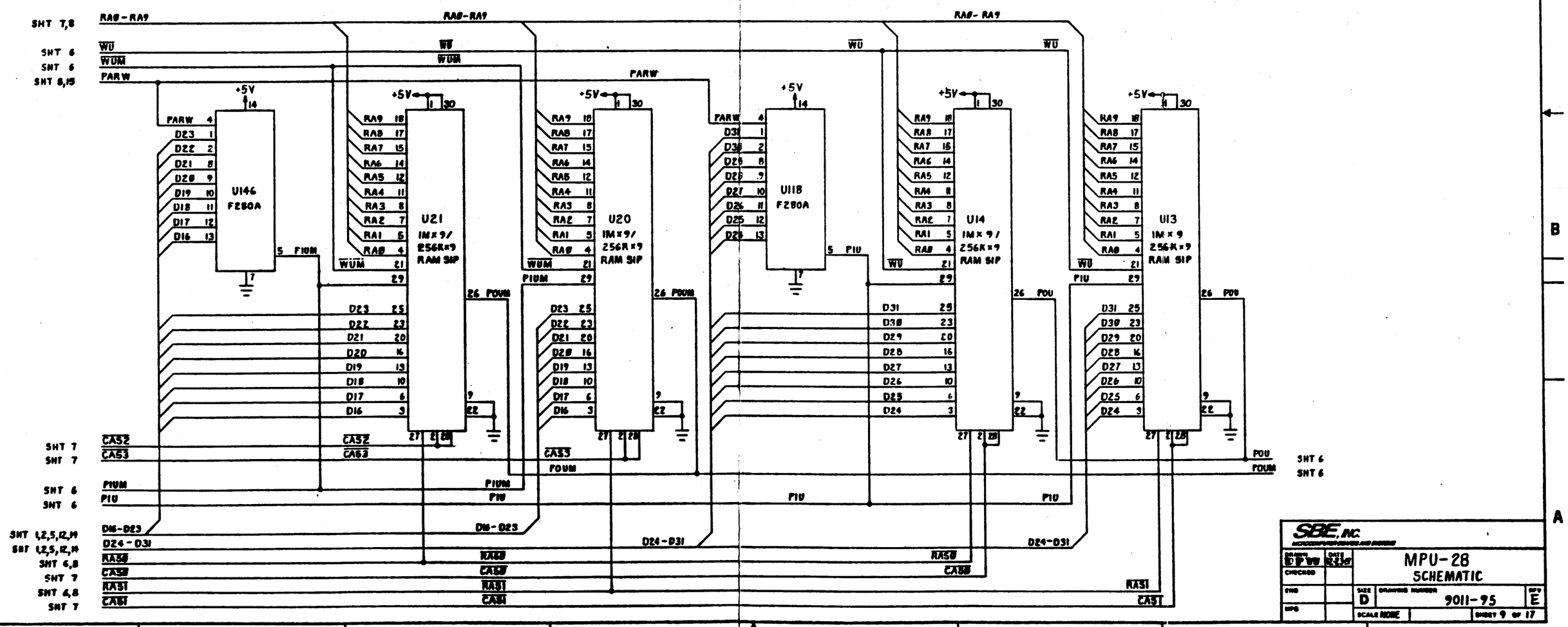
SCALE NONE | SHEET 4 OF 17

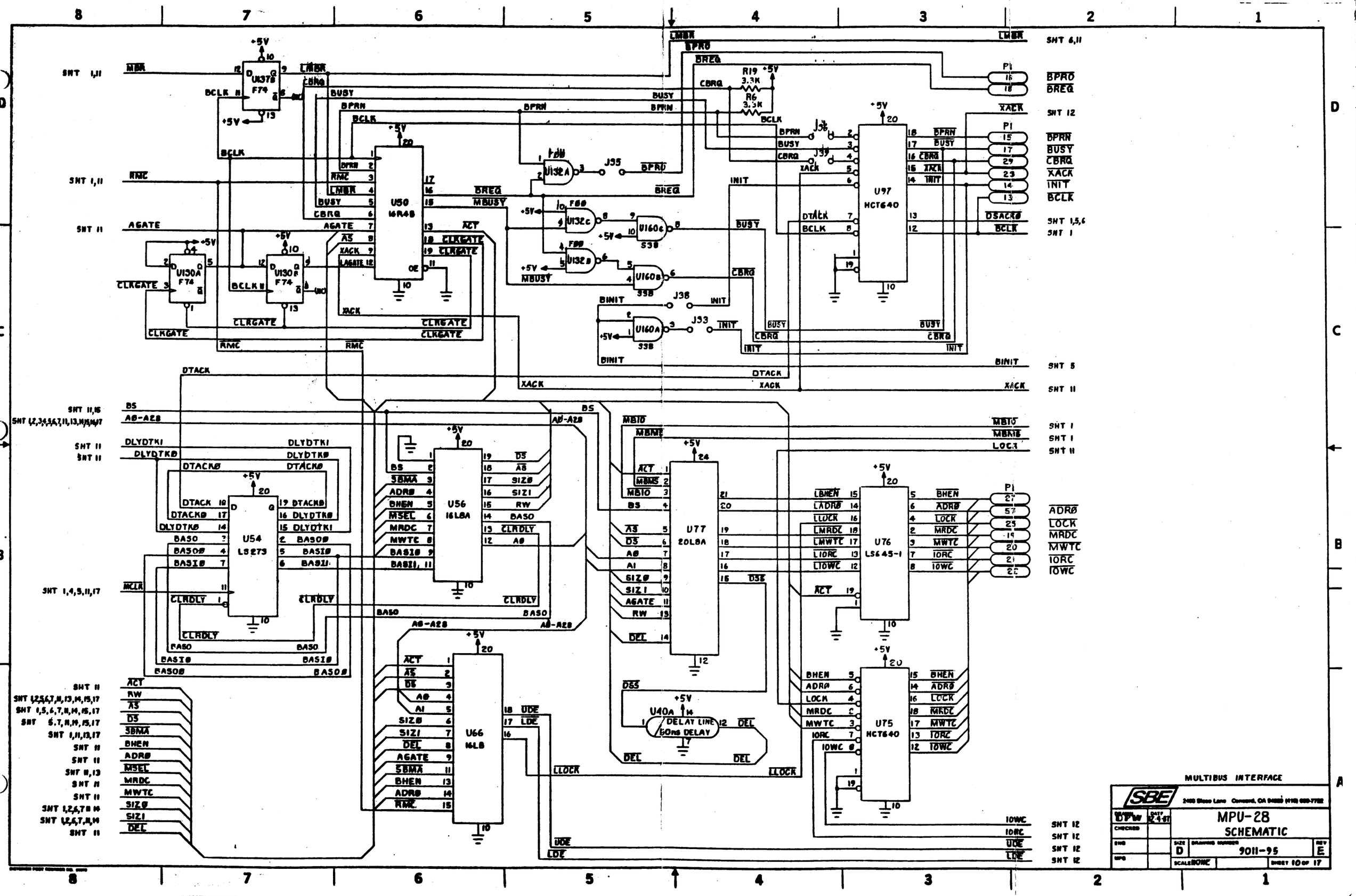

CLRT
SHT 15
+5V
U139A LS74
TCO
OAS
SHT 6,11
U136 LS164
MCLK
TBERR
U135A F74
U129 LS393
U132D
F00
SHT 12
MRES
U159 LS164
U142 LS393
MRESET
U135 LS164
U131B LS74
PRE
CLR
(NC)
MINIT
U148 LS393
TCLK
SHT 1,6,15
J4
R2 68K
C2 6.8µF
U9 NE555
C4 .1µF
J19
PRES
R18 10K
J30
U57 20L10
TMOUT
LINIT
TOKES
PRES
TBERR
LSBERR
MBERR
LPERR
MHALT
HALT
RESET
MRES
BERR
BOOT
U135B F74
U134 LS244
U46 LS164
ENBTF
CR1 GREEN LED
U64 68881 12/16/20 MHz OPTIONAL
A0-A28
COP
DS
RW
R/W
SIZE
SENSE
R15 3.3K
D31
D30
D29
D28
D27
D26
D25
D24
D23
D22
D21
D20
D19
D18
D17
D16
D15
D14
D13
D12
D11
D10
D9
D8
D7
D6
D5
D4
D3
D2
D1
D0
DSACK0
DSACK1
SHT 1,6,10
SHT 1,4,6,15
SHT 1,6,7,10,11,14,15,17
SHT 1,2,6,7,10,11,13,14,15,17
SHT 7,10,11,14,15,17
SHT 1,2,3,4,6,7,10,11,13,14,16,16,17
SHT 1
NMIN0
NMIN1
SBERR
MCLK
SHT 1,4,6,10,11,17
SHT 10
SHT 11
SHT 11
SHT 14,12,15
J20
SHT 1,6,11
SHT 12,16
SHT 12
SHT 1,15
SHT 4
SHT 1,15
SHT 11
COPROCESSOR AND START-UP CIRCUITS
SBE
2400 Bisso Lane Concord, CA 94520 (415) 680-7722
MPU-28
SCHEMATIC
DRAWING NUMBER 9011-95
REV E
SIZE D
SCALE
SHEET 8 OF 17

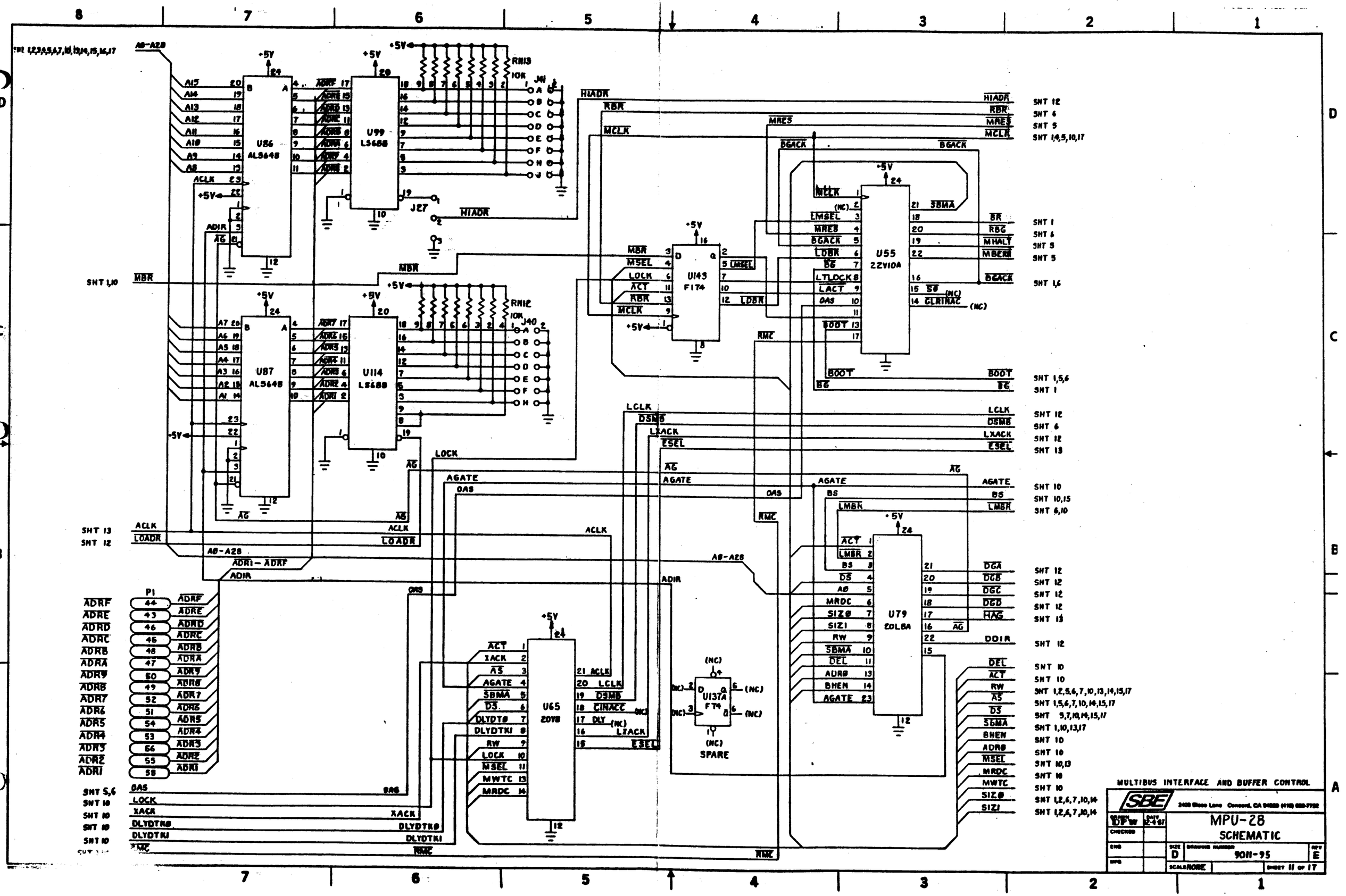

AS
SIZ1
SIZ0
A0-A23
OAS
RW
PAS
CASDEL
U145A
U145B
U41C
U144A
U150B
RAS
U41A
U41B
RRAS
+5V
U133A F74
U38 DELAY LINE 90ns
PREC
REFC
INHRAS
FC2
FC1
FC0
BOOT
U150A
U150C
U162D
U136D
MT
U37 DELAY LINE 50ns/ST
U40B DELAY LINE 50ns
U40C DELAY LINE 50 ns
U144B
U144C
U145C
A25
A24
U140A S260
CAST
U63 F521
PIU
POU
PIUM
POUM
PILM
POLM
PIL
POL
U133B F74
CPERR
15V
U134C
U134A
U68A
U68B
U68C
U68D SPARE
T0
T1
T3
T5
U59 DELAY LINE 200NS
U134B
U138A
U138B
U138C
U144D
U144E
U144F
R22
R23
R44 3.3K
R40
R43
U45 20L8B
DR
DSACK0
DSACK1
DSCTL
U52 16L8
STREF
GACK (NC)
BGACK
INHRAS
LPERR
PERR
RESET
RMREF
RCAS
TCLK
U70 LS393
U145D
SBE, INC.
MPU-28
SCHEMATIC
9011-95
SIZE D
REV E
SCALE NONE
SHEET 6 OF 17

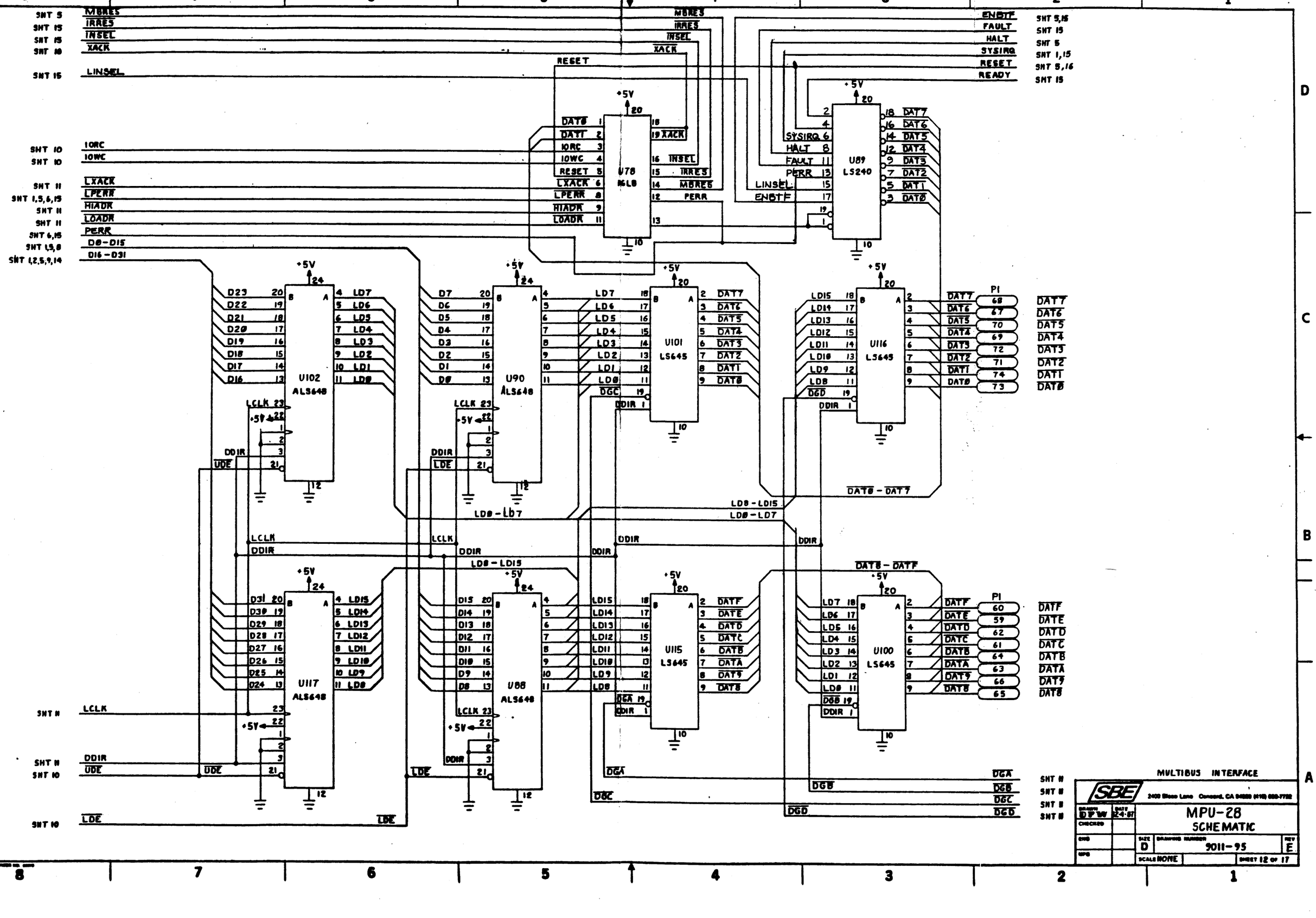

SHT 1,2,6,10,11,14 SIZ1
SHT 1,2,6,10,11,14 SIZ0
SHT 1,2,5,6,7,10,11,13,14,15,17 R/W
SHT 6 RCAS
SHT 6 CAST
SHT 6 AE
SHT 3,4,6 A0-A2B
SHT 1,2,3,4,5,6,10,11,13,14,15,16,17 A0-A2B
U39 16L8-7
R7 R24 R25 R45 R46 R47 R48 R49 33
CAS0 CAS1 CAS2 CAS3 CAS4 CAS5 CAS6 CAS7
SHT 9 SHT 9 SHT 9 SHT 9 SHT 8 SHT 8 SHT 8 SHT 8
RN8 3.3K
SHT 1,2,4,6 PAS
SHT 4 PD3
SHT 4 CNAS
U71B F27
J46 A20 A21 A11 A18 MT
U62 F258
U44 F240
R26 R27 R28 R29 R30 R31 10
AS DS
SHT 1,5,6,10,11,14,15,17
SHT 5,10,11,14,15,17
RA9 RA8
U42 SPARE
A19 A18 A17 A16 A9 A8 A7 A6 MT
U139 F258
A15 A14 A13 A12 A5 A4 A3 A2 MT
U141 F258
U43 F240
R32 R33 R34 R35 R36 R37 R38 R39 10
RA7 RA6 RA5 RA4 RA3 RA2 RA1 RA0
SHT 6
RA0-RA7 SHT 8,9
SBE, INC.
MPU-28
SCHEMATIC
SIZE D
9011-95
REV E
SCALE NONE
SHEET 7 OF 17

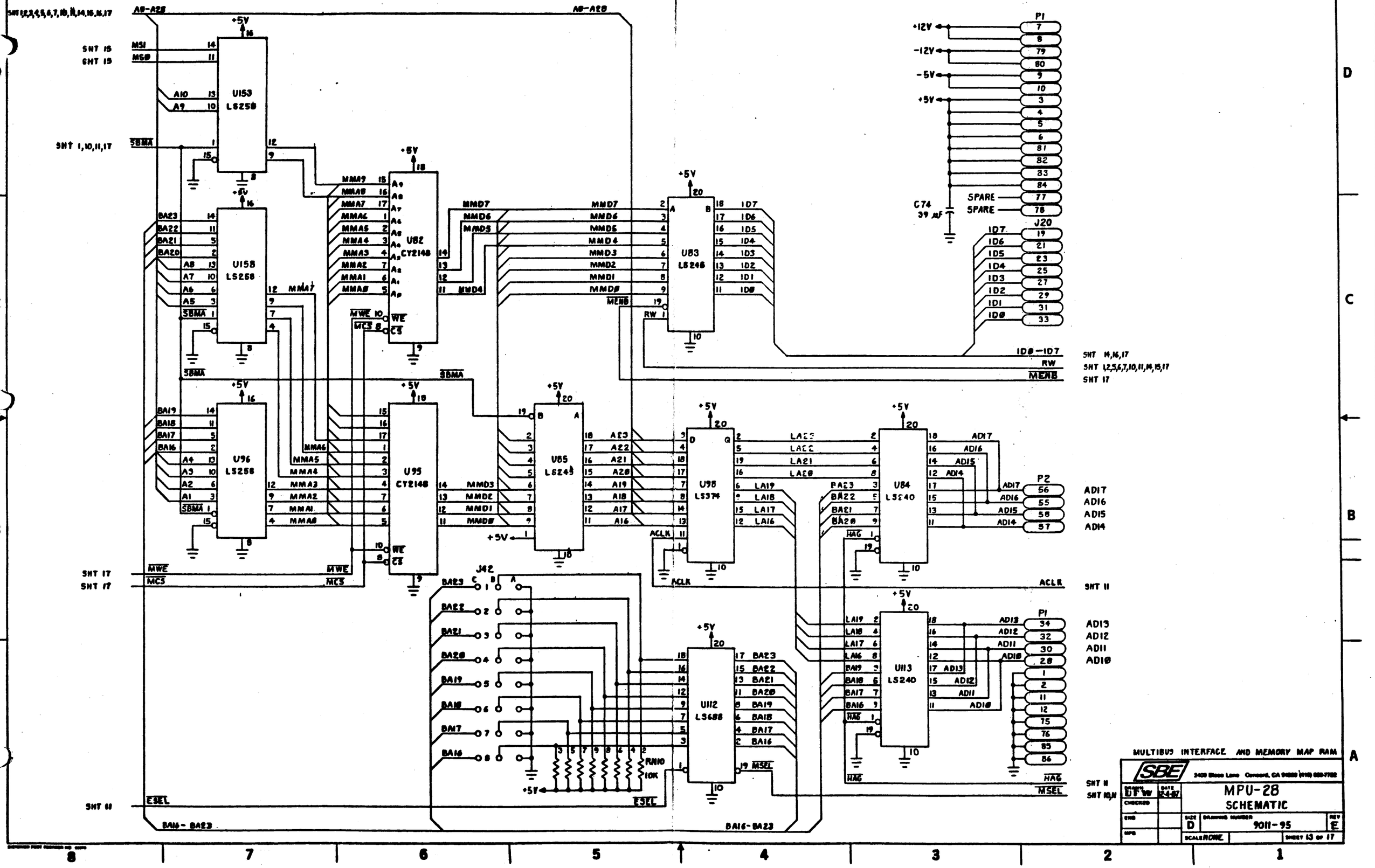

SHT 7,9
SHT 6
SHT 6
SHT 9,15
RA8-RA9
WL
WLM
PARW
RA8-RA9
WL
WLM
FARW
+5V
U149
FZ80A
U23
1M x 9/
256K x 9
RAM SIP
U22
1M x 9/
256K x 9
RAM SIP
U69
FZ80A
U25
1M x 9/
256K x 9
RAM SIP
U24
1M x 9/
256K x 9
RAM SIP
PARW
DI5
DI4
DI3
DI2
DI1
DI0
D9
D8
D15
D14
D13
D12
D11
D10
D9
D8
D7
D6
D5
D4
D3
D2
D1
D0
RA9
RA8
RA7
RA6
RA5
RA4
RA3
RA2
RA1
RA0
WLM
FILM
FARW
FIL
FILM
POLM
FIL
POL
SHT 7
SHT 7
SHT 6
SHT 6
SHT 1,5,12
SHT 1,5,12
SHT 6,9
SHT 7
SHT 6,9
SHT 7
CAS4
CAS5
FILM
FIL
D8-D15
D0-D7
RAS0
CAS6
RAS1
CAS7
SHT 6
SHT 6
SBE, INC.
MPU-28
SCHEMATIC
SIZE D
9011-95
REV E
SCALE NONE
SHEET 8 OF 17


SHT 7,8
SHT 6
SHT 6
SHT 8,15
RAS-RA9
WU
WUM
PARW
+5V
U146
F280A
U21
U20
U118
U14
U13
1M x 9/
256K x 9
RAM SIP
PIUM
PIU
POUM
POU
CAS2
CAS3
D16-D23
D24-D31
RAS0
CAS0
RAS1
CAS1
SHT 1,2,5,12,14
SHT 6,8
SHT 7
SHT 4,8
SBE, INC.
MPU-28
SCHEMATIC
9011-95
SIZE D
REV E
SCALE NONE
SHEET 9 OF 17


MBR
BCLK H
BUSY
BPRN
BCLK
RMC
AGATE
CLRGATE
BCLK H
LMBR
CBRQ
U137B F74
U130A F74
U130B F74
U50 16R4B
U132A
U132C
U132B
U160C
U160B
U160A
J35
J36
J38
J39
J33
BPRO
BREQ
MBUSY
INIT
BINIT
DTACK
XACK
R19 3.3K
R6 3.3K
U97 HCT640
DTACK
BCLK
DSACK0
P1
SHT 6,11
SHT 12
SHT 1,5,6
SHT 1
SHT 5
SHT 11
SHT 1,11
SHT 1,4,5,11,17
SHT 11,15
SHT 12,3,4,5,6,7,11,13,14,15,16,17
SHT 11
SHT 11
SHT 11
SHT 11,13
SHT 11
SHT 11
SHT 1,2,5,7,8,14
SHT 1,2,6,7,8,14
SHT 11
AB-A23
DLYDTKI
DLYDTKO
DTACK0
U54 LS273
BASO
BASI0
BASO0
MCLR
CLRDLY
U56 16L8A
U66 16L8
U77 20L8A
U40A
DELAY LINE 50ns DELAY
U76 LS645-1
U75 HCT640
ACT
RW
AS
DS
SBMA
BHEN
ADR0
MSEL
MRDC
MWTC
SIZ0
SIZ1
DEL
MBI0
MBM0
LOCK
UDE
LDE
LBHEN
LADR0
LLOCK
LMRDC
LMWTC
LIORC
LIOWC
BHEN
ADR0
LOCK
MRDC
MWTC
IORC
IOWC
P1
BPRO
BREQ
XACK
BPRN
BUSY
CBRQ
INIT
BCLK
DSACK0
ADR0
LOCK
MRDC
MWTC
IORC
IOWC
MULTIBUS INTERFACE
SBE
2400 Bisso Lane Concord, CA 94520 (415) 680-7722
DRAWN DPW 2.4.87
CHECKED
ENG
MFG
MPU-28
SCHEMATIC
SIZE D
DRAWING NUMBER 9011-95
REV E
SCALE NONE
SHEET 10 OF 17


A8-A23
U86 AL9648
U99 LS688
RN13 10K
J41
J27
HIADR
RBR
MRES
MCLK
BGACK
U143 F174
U55 22V10A
SBMA
BR
RBG
MHALT
MBERR
BGACK
BOOT
BG
U87 AL9648
U114 LS688
RN12 10K
J40
LOCK
AG
AS
AGATE
OAS
RMC
LCLK
DSMB
LXACK
ESEL
LMBR
U79 20L8A
ACT
BS
DS
AB
MRDC
SIZ0
SIZ1
RW
SBMA
DEL
ADR0
BHEN
DGA
DGB
DGC
DGD
HAG
DDIR
U65 20V8
XACK
DLYDTR0
DLYDTR1
MWTC
U137A F74
SPARE
ACLK
LOADR
ADR1 - ADRF
ADIR
P1
ADRF
ADRE
ADRD
ADRC
ADRB
ADRA
ADR9
ADR8
ADR7
ADR6
ADR5
ADR4
ADR3
ADR2
ADR1
SHT 1,10
SHT 13
SHT 12
SHT 5,6
SHT 10
MULTIBUS INTERFACE AND BUFFER CONTROL
SBE
MPU-28
SCHEMATIC
9011-95
SIZE D
REV E
SHEET 11 OF 17


MBRES
IRRES
INSEL
XACK
LINSEL
RESET
IORC
IOWC
LXACK
LPERR
HIADR
LOADR
PERR
D0-D15
D16-D31
ENBTF
FAULT
HALT
SYSIRQ
READY
U78 MSLB
U89 LS240
U102 ALS648
U90 ALS648
U101 LS645
U116 LS645
U117 ALS648
U88 ALS648
U115 LS645
U100 LS645
+5V
LCLK
DDIR
LDE
LD8-LD15
LD0-LD7
DAT8-DATF
DAT0-DAT7
DGA
DGB
DGC
DGD
PI
MULTIBUS INTERFACE
SBE
2400 Stanford Lane Concord, CA 94520 (415) 689-7722
MPU-28
SCHEMATIC
9011-95
SIZE D
REV E
SCALE NONE
SHEET 12 OF 17


A8-A23
SHT 1,2,3,4,5,6,7,10,11,14,15,16,17
SHT 15
SHT 15
MSI
MSO
A10
A9
SBMA
SHT 1,10,11,17
U153
LS258
+5V
U158
LS258
BA23
BA22
BA21
BA20
A8
A7
A6
A5
MMA7
U82
CY2148
MMA9
MMA8
MMA7
MMA6
MMA5
MMA4
MMA3
MMA2
MMA1
MMA0
MMD7
MMD6
MMD5
MMD4
MWE
WCS
WE
CS
U83
LS245
MEMR
RW
ID7
ID6
ID5
ID4
ID3
ID2
ID1
ID0
P1
+12V
-12V
-5V
SPARE
C74
39 µF
J20
ID0-ID7
RW
MEMR
SHT 14,16,17
SHT 12,5,6,7,10,11,14,15,17
SHT 17
U96
LS258
BA19
BA18
BA17
BA16
A4
A3
A2
A1
U95
CY2148
U85
LS245
U98
LS374
U84
LS240
LA23
LA22
LA21
LA20
LA19
LA18
LA17
LA16
ACLK
AD17
AD16
AD15
AD14
P2
SHT 17
SHT 17
MWE
MCS
J42
U112
LS688
RN10
10K
ESEL
SHT 11
U113
LS240
AD13
AD12
AD11
AD10
HAG
MSEL
SHT 11
SHT 10,11
BA16-BA23
MULTIBUS INTERFACE AND MEMORY MAP RAM
SBE
2400 Bisso Lane Concord, CA 94520 (415) 689-7722
DRAWN UFW
DATE 12-4-87
CHECKED
ENG
MFG
MPU-28
SCHEMATIC
SIZE D
DRAWING NUMBER 9011-95
REV E
SCALE NONE
SHEET 13 OF 17

U49 EPROM

U48 EPROM RAM EEPROM

U19 EPROM

U18 EPROM RAM EEPROM

U36 16L8A

U7 LS245

U120 LS245

U4 LS273

J5

J1

J2

J3

J20

P2

CR2

CR3

EPROMS AND EPROM CONTROL

SBE 2400 Stone Lane Concord, CA 94520 (415) 689-7722

| | | |
|---|---|---|
| DRAWN DP TW | DATE 2-4-87 | MPU-28 SCHEMATIC |
| CHECKED | | |
| ENG | | SIZE D DRAWING NUMBER 9011-95 REV E |
| MFG | | SCALE NONE SHEET 16 OF 17 |

PARALLEL INTERFACE/TIMER AND STATUS REGISTERS

SBE — 2400 Bisso Lane, Concord, CA 94520 (415) 680-7722

| | | | |
|---|---|---|---|
| DRAWN DPW | DATE 2-4-87 | MPU-28 SCHEMATIC | |
| CHECKED | | | |
| ENG | | SIZE D | DRAWING NUMBER 9011-95 REV E |
| MFG | | SCALE NONE | SHEET 15 OF 17 |

SHT 13,14,17 ID0-ID7

+5V

RN5 3.3K

U8 LS245

ID0 9
ID1 8
ID2 7
ID3 6
ID4 5
ID5 4
ID6 3
ID7 2

SHT 15 RLSRI 19

SW1

RN2 220 330

RN3 220 330

RN4 220 330

U15 53C90 (Z400138 EMULEX)

ID0 65
ID1 66
ID2 67
ID3 68
ID4 1
ID5 2
ID6 3
ID7 4

A1 57
A2 58
A3 59
A4 60

SHT 12,3,4,5,6,7,10,11,13,14,15,17 A0-A2

SHT 15 SCSICS 56

SHT 17 IRD 55

SHT 17 IWD 54

SHT 15 DACKN 52

SHT 1,5 MCLK 51

SHT 5,12 RESET 63

5

16

21

17 SCSD0
6 SCSD1
18 SCSD2
7 SCSD3
19 SCSD4
8 SCSD5
20 SCSD6
9 SCSD7
22 SCSDP
10 SCSEL
23 SCSBSY
11 SCSATN
24 SCSACK
12 SCSRST
25 SCSIO
13 SCSCD
26 SCSMSG
14 SCSREQ
28

50 (NC)
39 (NC)
62 (NC)

33 DREQ
61 SCSINT

27 32 38 54

J43

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 43 44 35 36 31 32 37 38 39 40 49 50 45 46 41 42 47 48 19 21 23 25 27

SHT 15,17
SHT 1,15

J43 29 33 49

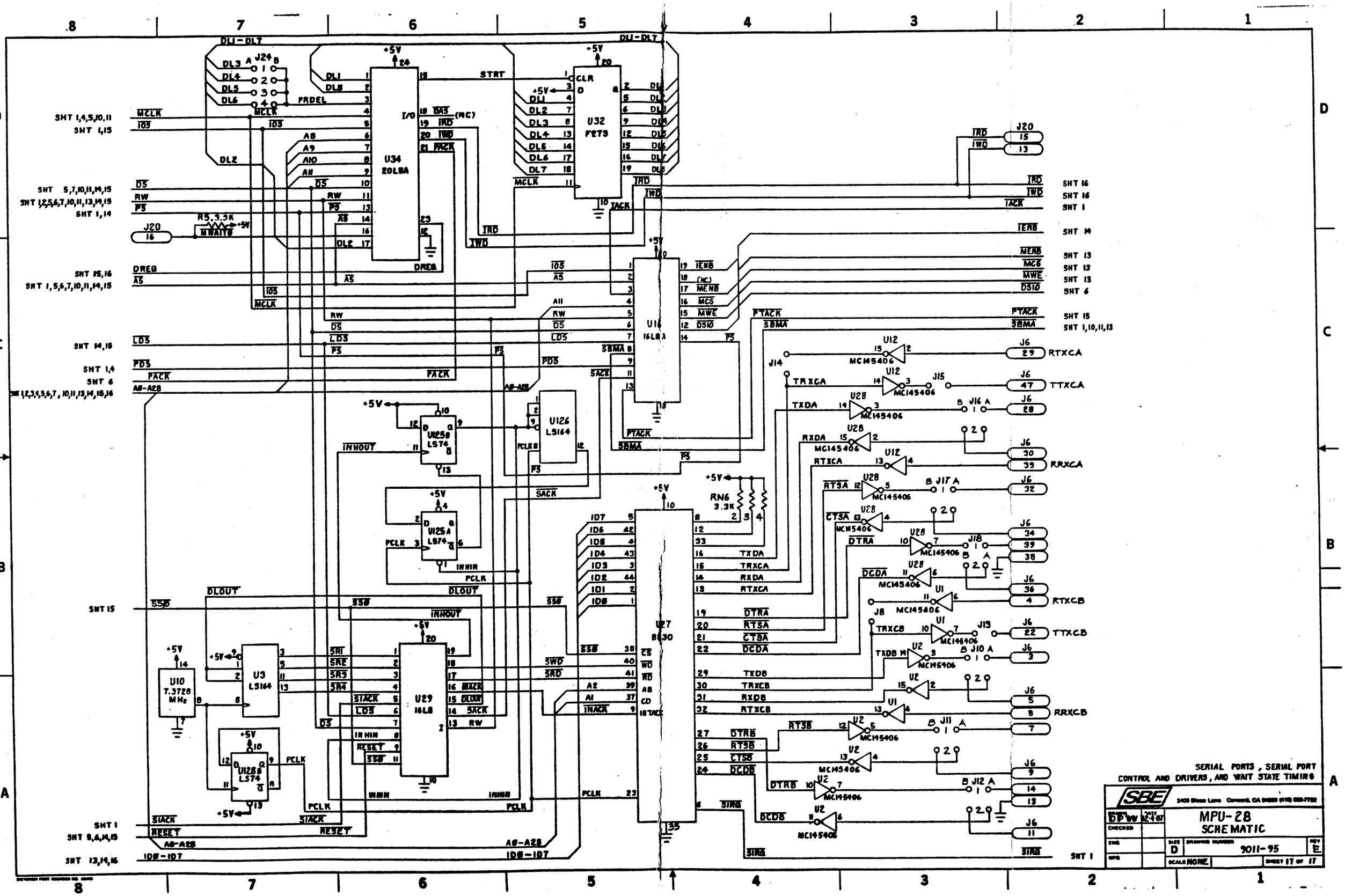
SBE, INC.

DRWN BTW 2-4-87
CHECKED
ENG
MFG

MPU-28
SCHEMATIC

SIZE D DRAWING NUMBER 90W-95 REV E

SCALE NONE SHEET 16 OF 17


DL1-DL7
+5V
J24
DL3
DL4
DL5
DL6
PRDEL
MCLK
IOS
DL2
U34
20L8A
I/O
STRT
BAS (NC)
IRD
IWD
PACK
U32
FE73
CLR
D
Q
DL1
DL2
DL3
DL4
DL5
DL6
DL7
TACK
A8
A9
A10
A11
DS
RW
PS
AS
R5, 3.3K
MWAITS
J20
16
DREQ
DACK
U16
16L8-3
IENB
(NC)
MENB
MCS
MWE
DS10
SBMA
PDS
FACK
A8-A28
LDS
U126
LS164
U125B
LS74
INHOUT
FCLK8
U125A
INHIN
PCLK
DLOUT
SSO
U27
8630
CS
WD
RD
AB
CD
INTACK
ID7
ID6
ID5
ID4
ID3
ID2
ID1
ID0
SWD
SRD
A2
A1
INACK
U3
LS164
SR1
SR2
SR3
SR4
U10
7.3728
MHz
U29
16L8
STACK
RESET
SSO
U128B
LS74
RN6
3.3K
TXDA
TRXCA
RXDA
RTXCA
DTRA
RTSA
CTSA
DCDA
TXDB
TRXCB
RXDB
RTXCB
DTRB
RTSB
CTSB
DCDB
SINA
SINB
U12
MC145406
U28
U1
U2
J14
J15
J16 A
J17 A
J18
J8
J13
J10 A
J11 A
J12 A
RTXCA
TTXCA
RRXCA
RTXCB
TTXCB
RRXCB
SHT 1,4,5,10,11
SHT 1,15
SHT 5,7,10,11,14,15
SHT 1,2,5,6,7,10,11,13,14,15
SHT 1,14
SHT 14,18
SHT 1,4
SHT 6
SHT 1,2,3,4,5,6,7,10,11,13,14,15,16
SHT 15,16
SHT 1,5,6,7,10,11,14,15
SHT 1
SHT 9,6,14,15
SHT 13,14,16
SHT 16
SHT 14
SHT 13
SHT 6
SHT 15
SHT 1,10,11,13
SERIAL PORTS, SERIAL PORT CONTROL AND DRIVERS, AND WAIT STATE TIMING
SBE
2400 Bisso Lane Concord, CA 94520 (510) 680-7722
DRAWN DFW 12-4-87
CHECKED
ENG
MFG
MPU-28
SCHEMATIC
SIZE D
DRAWING NUMBER 9011-95
REV E
SCALE NONE
SHEET 17 OF 17